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# Mixed Messages: Examining External Barriers to University Student Ethical Clothing Consumption

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**ABSTRACT** While a majority of research in ethical fashion consumption is largely focused on contexts such as means of production or the decision-making process of consumers, this research seeks to explore external barriers to millennial consumption of sweatshop-free clothing. Consumer concern and consumer awareness has increased, but this is not reflected in the market. This research seeks to deepen the knowledge into some external factors beyond that of consumer decision-making and other internal factors of the self (i.e. guilt) that impact purchasing. A two-part survey was conducted, featuring a choice experiment where respondents had to choose from various white t-shirt options. This paper focuses on the results of the second part of the survey. These t-shirts varied due to the attributes of price, country of manufacture, and presence of environmental or social label. The results showed that university students pay attention to price as their predominant determinant to purchase. There was also evidence that the presence of environmental labels, social labels, and the “Made in the USA” label, also influenced purchasing decisions. This paper contributes to a greater understanding of Millennial and Generation Z consumers, and gives insight into ways to make ethical clothing more attractive and popularized.

## INTRODUCTION

The fashion industry has undergone several transformations throughout its history, evolving from family members or tailors hand stitching each garment for the wearer to ready-to-wear apparel made abroad (Linden, 2016; Cline, 2013). The evolution of clothing manufacturing and consumption has led to an uptick in the fast fashion sector of the industry, and through many changes in manufacturing we have lost the ability to fully recognize who has made our clothes and where

they truly come from. There is a general disregard for the treatment and conditions surrounding garment workers at both the business and consumer level (Arrington, 2019). This “business as usual” mentality surrounding the industry is what keeps our clothing being made unethically. Unethical practices vary from being environmentally damaging or polluting (Mukherjee, 2015), using toxic chemicals in manufacturing (Grappi, Romani, &

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Barbarossa, 2017), using slave labor or exploitative labor practices (Voss et al., 2019, US Department of Labor, 2018), to animal ethics or welfare concerns (Planntin, 2016), among others. However, the discourse surrounding ethical fashion and more ethical consumption of clothing is growing among younger consumers, specifically the millennial generation. Social and environmental issues are as much a part of the fashion industry as the garments worn. Recent research indicates that “66 percent of global Millennials are willing to spend more on brands that are sustainable” (Business of Fashion Team & McKinsey & Company, 2018). “Sustainable” in this context is described as brands that are moving more towards closed loop systems. The current model of purchasing is a linear model where the life cycle of a garment ends with the consumer discarding it. A closed-loop supply chain continues beyond the consumer, and features collection of used garments from consumers in order to reprocess them, and later provide recycled products to manufacturers or customers in the supply chain (Oh, J. & Jeong, 2014).

Despite the growing amount of consumer concern and awareness of the implications of the fashion industry, consumer purchasing patterns often do not reflect stated ethical concerns. This ethical purchasing gap (Bray et al., 2010), often termed the attitude-behavior gap (Kim et al., 1997), has primarily led to research (Shaw et al., 2006) exploring other individual factors that can impact purchasing such as: guilt, self-identity, and moral obligation (Bray et al., 2010), as well as fast fashion avoidance or avoiding purchasing more generally (Kim et al., 2013).

Ethical consumption research has been heavily focused on food (Pelsmacker et al., 2005; Didier & Lucie, 2008; Mahé, 2010). There is very little research on the external barriers to ethical apparel

consumption, and there is little to no specific focus on millennial age groups when looking at ethical clothing consumption. Understanding the attitude-behavior gap in millennials is important because millennials are introspective or reflective shoppers who are using brands and their spending power as a communication tool, a way to express their social and community values (Gurau, 2013). Generation Z is another under-studied age group with respect to their attitudes surrounding ethical fashion and purchasing. Understanding these consumers is important since they are gaining purchasing power. Understanding barriers outside of factors of the self that impact decision-making processes can help identify better ways to increase ethical consumption and a better understanding of when and why younger consumers engage in ethical consumption. The attitude-behavior gap can perhaps be attributed to factors outside of the consumer’s mindset, and may be factors that surround them in their everyday life.

## METHODS

Our methodology consists of a two-part survey. This paper will focus on the results obtained from the second part of the survey. The initial survey was conducted to identify what attributes drive university students to purchase clothing, as well as how often they shop for clothing. Beyond this, the survey sought to identify university students’ knowledge of ethical issues in clothing, and whether or not ethical concerns affect clothing purchasing. The second part of the survey contained a choice experiment. This method was used to uncover which attributes were valued by respondents to gain further insight into university student willingness to pay (WTP) for different ethical clothing attributes (social and environmental). The choice experiment part of the survey gave respondents several white t-shirt options for purchase, all differentiated by various attributes (Figure 1).

Which of the following T-shirts would you choose?

<p><b>Not made with Certified Organic Cotton</b></p> <p><b>Made in India</b></p> <p><b>\$23.00</b></p>	<p><b>Certified Organic Cotton</b></p> <p><b>Made in the USA</b></p> <p><b>\$38</b></p>	<p><b>Fair Trade Certified</b></p> <p><b>Unknown Origin</b></p> <p><b>\$13.25</b></p>	<p><b>✗ None of the above</b></p>
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**Figure 1.** Example of a choice card presented to survey respondents.

A white t-shirt was chosen due its unisex nature, and range of price points/ choices for purchasing in the market. This option was void of designs or specific details of t-shirt cuts (neck, hem length, sleeve length, etc.) to decrease bias of an otherwise universal product. Respondents had three t-shirt options to choose from, along with a fourth option to opt-out of buying any of the t-shirts. The opt-out option is to ensure that respondents do not feel pressured to pick a choice that is not actually attractive to them. Based on previous published findings, the following attributes were selected in order to describe the t-shirt options: price point (Moser, 2016; Bray et al., 2010), country of manufacture (Sepúlveda et al., 2016), and environmental or social labels (Rousseau, 2015; Pelsmacker et al., 2005; Table 1). Price point and country of manufacture attribute levels were determined through online research of white t-shirts. Using the Google Shopping window, T-shirt research was segmented by different price points starting with fast fashion options all the way to luxury fashion options. Through these options we were able to determine common price points and country of manufacture to determine the various attribute levels.

Attributes	Attribute Levels
Price point	\$38.00 \$33.00 \$23.00 \$20.50 \$13.25 \$5.00
Country of Manufacture	Made in the USA Made in India Imported Unknown Origin
Environmental or Social Label	Fair Trade Certified Certified Organic Cotton Fair Trade Certified & Certified Organic Cotton Not Fair Trade Certified Not made with Certified Organic Cotton

**Table 1.** Attributes and attribute levels used in conjoint analysis.

Other work on consumer choices has used a discrete choice experiment where the respondent chooses one of two options (Klimas & Webb, 2018). However, with a limit of two options it becomes difficult to determine the main motivator of purchase, due to the fact that clothing often has multiple attributes that are poorly described by two options.

## Data Analysis

Data collected from the questionnaire was analyzed via Conjoint.ly, an online service for pricing and product research. The results from this choice experiment are used to calculate a utility score. This is a measurement of the amount of influence each attribute and attribute level had on the respondent's decision leading to their choice (Conjointly).

Marginal WTP was determined via Conjoint.ly using the formula for the marginal rate of substitution.

$$MWTP_j = V_j / V_p$$

Within this formula

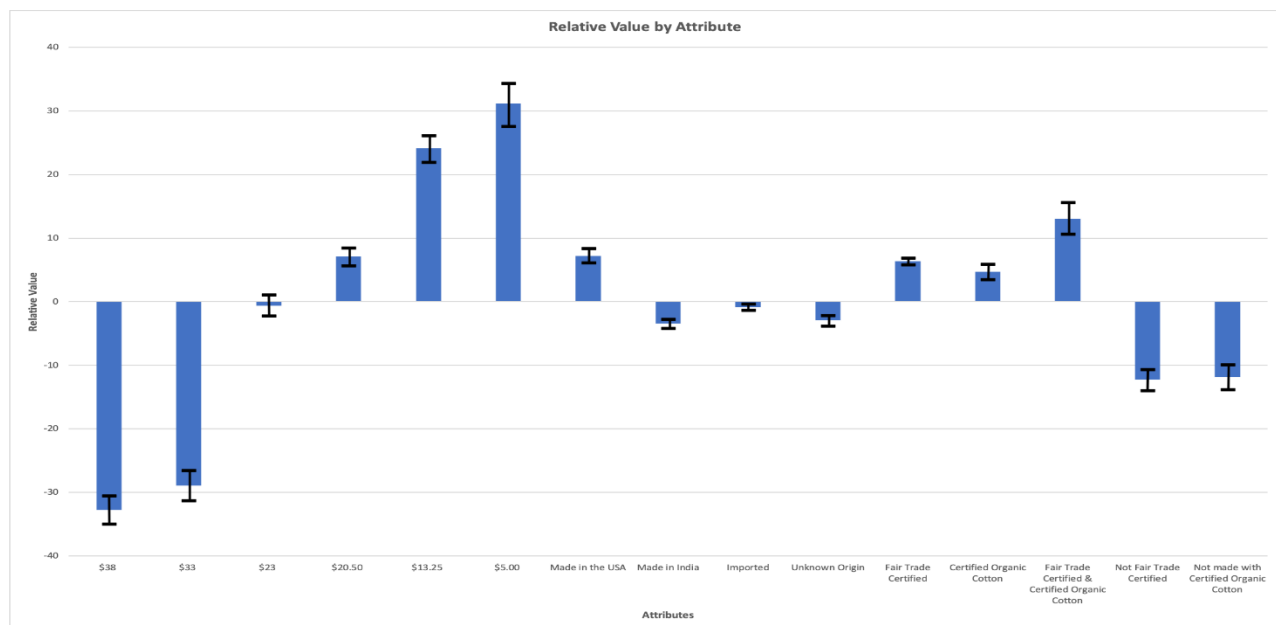
MWTP<sub>j</sub> is the standard marginal willingness to pay of feature j,

V<sub>j</sub> is the value of feature j,

V<sub>p</sub> is the value of price (Conjoint.ly).

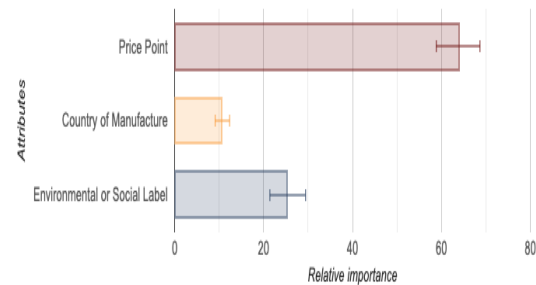
A McFadden's Pseudo R<sup>2</sup> value was used to determine the goodness of fit. This value is obtained through conducting a logistic regression. The R<sup>2</sup> value will fall between 0% and 100% (or 0 and 1). The closer the value is to 100% (or 1) signifies that the model represents the data well.

## RESULTS



**Figure 3.** Results of relative value per attribute level from respondent data.

The data revealed that price point was the most important factor in purchasing clothing for university students. This was followed by the presence of an environmental or social label. The attribute with the least amount of relative importance in purchasing was country of origin (Figure 2).



**Figure 2.** Results of relative importance from respondent data.

The sections to follow detail the results and are shown in Figure 3. These sections highlight which attribute level was the most favored among respondents.

### T-Shirt Attributes

When looking at price point we see that the lowest price option (\$5.00) was the choice of most respondents (Figure 3).

Respondents preferred the “Made in the USA” option over the other choices in the country of manufacture attribute (Figure 3).

The most popular choice regarding the environmental or social label attribute was “Fair Trade Certified & Certified Organic Cotton.” This was followed by a preference for fair trade certification, and finally a certified organic label (Figure 3).

#### Goodness of Fit

The McFadden’s Pseudo  $R^2$  value is a metric used to determine if respondents’ answers to the survey are statistically significant. The  $R^2$  value obtained

was 70%. This value is close to 100% (or 1) signifying that the model including price, country of manufacture, and the presence of environmental or social labels explained 70% of the variation in WTP. This indicates a strong model fit.



**Figure 4.** Rankings of t-shirt options from respondent data for price point attribute level of \$5.00. Shorthand key of t-shirt attributes: USA = Made in USA, In = India, Im = Imported, UO = Unknown Origin; FTC = Fair Trade Certified, COCo = Certified Organic Cotton, FTC & COCo = Fair Trade Certified and Certified Organic Cotton, Not FTC = Not Fair Trade Certified, Not COCo = Not Certified Organic Cotton

## DISCUSSION

### Price Point as the Deciding Factor

Our results show that the price point attribute is the most important to university students when purchasing clothing. Unsurprisingly, the most popular choice was the lowest price option of \$5.00 followed by the second lowest price option

of \$13.25. These price points coincide with clothing options available at fast-fashion stores or thrift/ second hand stores. When looking at respondent data, we see their preferred shopping locales are those that are more affordable. The ever-increasing demand for fast fashion (Barnes &

Lea-Greenwood, 2006) and success of these retailers in the marketplace (Jin et al., 2012) supports the respondent data.

Our study used t-shirts in the choice experiment; this could be a reason as to why price point was the most important feature. A study conducted by

Yoh, Chen, and Jang (2016), showed that when purchasing utilitarian products, consumers were more sensitive about prices, and more flexible in spending more for hedonic products. A plain white t-shirt is likely to be viewed as a utilitarian clothing choice, rather than a hedonic one, since styling options are limited in this product.

Better understanding why less utilitarian garments inspire a higher marginal willingness to pay is important in determining how pricing of ethical garments can be more competitive in the marketplace.

#### Desirability of US Origin Label

Due to the high percentage of clothing from imported origins ranging from China to Bangladesh, Vietnam, India, and Indonesia, we predicted that country of origin would not be as important to respondents. In 2015, 97 percent of clothing sold in the US was imported (Sherman, 2016). Thus, the respondents' favoring of the "Made in the USA" attribute level in our study was a surprising result. In a study conducted by Lantz and Loeb (1996), the authors found that in the case of low-involvement products, or products that only reflect routine purchase decisions and are undifferentiated by price, country of origin was an important variable in determining purchase preference for respondents; using a plain white t-shirt in the current study may have allowed this pattern to emerge. The same study (Lantz & Loeb, 1996) also showed that respondents with a stronger sense of consumer ethnocentrism have a higher marginal willingness to pay for domestic products, while respondents that had a lower sense of consumer ethnocentrism were willing to switch to imported products. Consumer ethnocentrism is based on the belief that it is wrong to purchase imported products because it is unpatriotic and does not stimulate the local economy, while non-ethnocentric consumers base their purchasing of

imported products on the product's merits regardless of origin (Teo et al., 2011).

Stereotypes or bias towards specific countries could give possible indication as to why there is a strong favoring of US made goods. In a study conducted by Liu and Johnson (2005), the results indicated that country-level or national stereotypes can alter evaluations of brands. The authors suggested that brands that originated from countries that had associations with negative stereotypes should use other buying strategies to attract consumers and draw less attention to their country of origin. One of the suggested strategies was price reduction. This suggestion is supported by the results of our study, which demonstrated that clothing not of US origin was more popular at the lowest price point (\$5.00) (Figure 4) or in conjunction with other attributes such as the environmental or social labels. In a study conducted by Cedrone (1991), findings showed that American consumers had a country stereotype that sewn products from the US were high quality. Sometimes with this US-made stereotype, we also see a higher willingness to pay for the garment (Ha-Brookshire & Norum, 2011).

In a study conducted by Kim et al. (2013), foreignness had a significant effect on the avoidance of fast fashion purchasing. The study showed that respondents believed that local fashion and culture were negatively affected by foreign brand consumption. Along the lines of avoidance, a study conducted by Connell (2011) shows that American consumers believed that American made garments were more environmentally friendly and socially responsible than garments made elsewhere. The respondents stated that they would rather purchase an American made product over an imported product. This was because of their current knowledge of labor laws in the US and associations of carbon footprints with transportation.

The desirability of the "Made in the USA" label is important in understanding attributes favored by consumers. Further understanding of consumer ethnocentrism and the consumers' ethnocentric tendencies scale (CETSCALE) (Shimp & Sharma, 1987) in conjunction with the presence



of environmental or social labels, can be important in determining which is more important in motivating sustainable purchasing.

#### Desirability of Environmental or Social Label

The presence of an environmental or social label was the second most important attribute in purchasing for university students. This strong preference for purchasing clothing that features both a fair trade certification and a certified organic cotton label shows consumer concern for ethics in purchasing. These findings contradict the literature, which suggests that there is little evidence of ethical issues influencing consumers' fashion purchase behavior (Barnes, Greenwood, & Joergens, 2006; Didier & Lucie, 2008; Kim et al., 2013). The strong preference for the fair trade certification in combination with the certified organic cotton label contradicts the study conducted by Didier and Lucie (2008), which states that dual ethical labelling of a product impacts WTP less than or equal to the resulting WTP of a single ethical label.

In the study conducted by Didier and Lucie (2008), there was a condition for purchasing products with environmental or social labels: that condition was liking the product. It seems that valuation of a product must already be positive for environmental or social labels to be noticed and notably add to the product's valuation. This is supported by the study conducted by Barnes, Greenwood, and Joergens (2006). Their study found that the most important influences in purchasing were style and that respondents liked the product. They found that liking the product superseded a concern for ethics. Similarly in the study

conducted by Ogle et al. (2014), the results showed that teen girls gave consideration to the extent to which their purchases would be "well-liked" by others. Liking a product or the product being liked by others proved to be a motivating factor in purchasing garments with ethical labels as well. Teens were more inclined towards ethical purchasing if the product had both the ethical impact towards environmental or social causes and was perceived to be aesthetically pleasing and utilitarian. Our choice experiment was conducted with a series of options for a white t-shirt. Since this is a utilitarian item lacking in hedonistic traits (designs, color, etc.), liking the t-shirt should not have an influence on respondents.

#### Conclusion

Despite university students' evident preference for environmental or social labels, price is still the highest attribute contributing to WTP. However, through the results of this choice experiment we gain insight into ways to increase WTP. The strong preference for the "Made in the USA" shows that there may be a market for US made apparel. The preferences for the combination of both the fair trade certification and the certified organic cotton label, shows a need for further research into combination of labels and their impacts on WTP. The choice experiment could be expanded by adding hedonic attributes to see if they influence WTP. Since previous literature (Yoh, Chen, and Jang, 2016) show that hedonic apparel products have a higher willingness to pay; we see a way for ethical brands to possibly elevate their garments in a way that will be more attractive to university-age students.

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